



DEPARTMENT OF THE AIR FORCE  
59TH MEDICAL WING (AETC)  
JOINT BASE SAN ANTONIO - LACKLAND TEXAS

3 MAR 2017

MEMORANDUM FOR SGOWMP  
ATTN: GERALD W. TALCOTT

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

1. Your paper, entitled **Tobacco Initiation and Re-Initiation Following A Period of Forced Abstinence: Brief Tobacco Interventions** presented at/published to **San Antonio Military Health System and Universities Research Forum** in accordance with MDWI 41-108, has been approved and assigned local file #**17118**.
2. Pertinent biographic information (name of author(s), title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.
3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are 59 MDW staff member, we can forward your request for funds to the designated wing POC.
4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

Linda Steel-Goodwin

LINDA STEEL-GOODWIN, Col, USAF, BSC  
Director, Clinical Investigations & Research Support

# PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS

## INSTRUCTIONS

### USE ONLY THE MOST CURRENT 59 MDW FORM 3039 LOCATED ON AF E-PUBLISHING

1. The author must complete page two of this form:
  - a. In Section 2, add the funding source for your study [ e.g., 59 MDW CRD Graduate Health Sciences Education (GHSE) (SG5 O&M); SG5 R&D; Tri-Service Nursing Research Program (TSNRP); Defense Medical Research & Development Program (DMRDP); NIH; Congressionally Directed Medical Research Program (CDMRP) ; Grants; etc.]
  - b. In Section 2, there may be funding available for journal costs, if your department is not paying for figures, tables or photographs for your publication. Please state "YES" or "NO" in Section 2 of the form, if you need publication funding support.
2. Print your name, rank/grade, sign and date the form in the author's signature block or use an electronic signature.
3. Attach a copy of the 59 MDW IRB or IACUC approval letter for the research related study. If this is a technical publication/presentation, state the type (e.g. case report, QA/QI study, program evaluation study, informational report/briefing, etc.) in the "Protocol Title" box.
4. Attach a copy of your abstract, paper, poster and other supporting documentation.
5. Save and forward, via email, the processing form and all supporting documentation to your unit commander, program director or immediate supervisor for review/approval.
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8. The 59 CRD/Publications and Presentations Section will route the request form to clinical investigations, 502 ISG/JAC (Ethics Review) and Public Affairs (59 MDW/PA) for review and then forward you a final letter of approval or disapproval.
9. Once your manuscript, poster or presentation has been approved for a one-time public release, you may proceed with your publication or presentation submission activities, as stated on this form. **Note:** For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.
10. If your manuscript is accepted for scientific publication, please contact the 59 CRD/Publications and Presentations Section at 292-7141. This information is reported to the 59 MDW/CC. All medical research or technical information publications/presentations must be reported to the Defense Technical Information Center (DITC). See 59 MDWI 41-108, *Presentation and Publication of Medical and Technical Papers*, for additional information.
11. The Joint Ethics Regulation (JER) DoD 5500.07-R, *Standards of Conduct*, provides standards of ethical conduct for all DoD personnel and their interactions with other non-DoD entities, organizations, societies, conferences, etc. Part of the Form 3039 review and approval process includes a legal ethics review to address any potential conflicts related to DoD personnel participating in non-DoD sponsored conferences, professional meetings, publication/presentation disclosures to domestic and foreign audiences, DoD personnel accepting non-DoD contributions, awards, honoraria, gifts, etc. The specific circumstances for your presentation will determine whether a legal review is necessary. **If you (as the author) or your supervisor check "NO" in block 17 of the Form 3039, your research or technical documents will not be forwarded to the 502 ISG/JAC legal office for an ethics review.** To assist you in making this decision about whether to request a legal review, the following examples are provided as a guideline:

For presentations before professional societies and like organizations, the 59 MDW Public Affairs Office (PAO) will provide the needed review to ensure proper disclaimers are included and the subject matter of the presentation does not create any cause for DoD concern.

If the sponsor of a conference or meeting is a DoD entity, an ethics review of your presentation is not required, since the DoD entity is responsible to obtain all approvals for the event.

If the sponsor of a conference or meeting is a non-DoD commercial entity or an entity seeking to do business with the government, then your presentation should have an ethics review.

If your travel is being paid for (in whole or in part) by a non-Federal entity (someone other than the government), a legal ethics review is needed. These requests for legal review should come through the 59 MDW Gifts and Grants Office to 502 ISG/JAC.

If you are receiving an honorarium or payment for speaking, a legal ethics review is required.

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**NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement:

**"The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components"**

**NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement for research involving humans:

**"The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02\_AFI 40-402."**

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**"The experiments reported herein were conducted according to the principles set forth in the National Institute of Health Publication No. 80-23, Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act of 1966, as amended."**



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5. PROTOCOL TITLE: ( <b>NOTE:</b> For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.) Evaluation of a Brief Tobacco Intervention in the US Military			
6. TITLE OF MATERIAL TO BE PUBLISHED OR PRESENTED: Tobacco Initiation and Re-initiation following a Period of Forced Abstinence: Brief Tobacco Interventions			
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DATE February 23, 2017			
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a. Primary/Corresponding Author Little, Melissa, A., PhD	Non DoD Civ AI	59MHS/SGOWMP	59MDW
b. Krukowski, Rebecca, PhD	Non DoD Civ	N/A	UTHSC
c. Hryshko-Mullen, Ann, S., PhD	DoD Civ Co-PI	59MHS/SGOWMP	59MDW
d. Talcott, G., Wayne, PhD	Non DoD Civ	59MHS/SGOWMP	59MDW
e.			
17. IS A 502 ISG/JAC ETHICS REVIEW REQUIRED (JER DOD 5500.07-R)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
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<b>PROCESSING OF PROFESSIONAL MEDICAL RESEARCH/TECHNICAL PUBLICATIONS/PRESENTATIONS</b>		
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26. DATE REVIEWED March 01, 2017	27. DATE FORWARDED TO 502 ISG/JAC	
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29. COMMENTS <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED IRB approved study with appropriate disclaimers. Approved		
30. PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER Kevin Kupferer/GS13/Human Research Subject Protection Expert	31. REVIEWER SIGNATURE <small>Digitally signed by KUPFERER KEVIN R. 1086667270            DN: cn=KUPFERER KEVIN R. 1086667270, o=59 MDW/CRD, ou=USAF, email=KUPFERER.KEVIN.R.1086667270            Date: 2017.03.01 15:51:44 -0800</small>	32. DATE March 01, 2017
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## **Disseminable Health Behavior Interventions in Active Duty Military Populations**

Ann S. Hryshko-Mullen<sup>1</sup>, Rebecca A. Krukowski<sup>2</sup>, Melissa A. Little<sup>2</sup>, Gerald W. Talcott<sup>2</sup>

<sup>1</sup> Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio- Lackland

<sup>2</sup> Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center

**Focus area:** Preventive Medicine

### **Keywords:**

military health

obesity

overweight

tobacco

alcohol

heavy drinking

interventions

dissemination

### **OBJECTIVES**

Following this seminar, the participants will be able to:

- (1) Describe health risk areas of concern including overweight, tobacco use and heavy drinking.
- (2) Understand reasons active duty military members are motivated to participate in weight management interventions across gender, race, ethnicity, age and rank.
- (3) Describe evidence-based weight management strategies that are promising for translation in military populations.
- (4) Understand the problem of tobacco initiation and re-initiation and alcohol misuse in Air Force Technical Trainees.
- (5) Understand key components of effective interventions for treating health risk behaviors in Technical Training.
- (6) Identify opportunities for collaborations related to disseminating effective health behavior interventions in active duty military populations.

### **SIGNIFICANCE**

In the U.S. military, obesity, tobacco use and heavy drinking are major public health problems, leading to productivity loss and impaired military readiness. A 2012 report from the Institute of Medicine called the abuse of alcohol in the military a public health crisis while the tobacco-related costs in the military health system in 2006 was estimated at \$564 million and overweight and obesity are estimated to cost roughly \$106 million per year due to lowered productivity and missed work. The Department of Defense (DoD) has implemented a number of policies and programs to address the problems of obesity, heavy drinking and tobacco use, however these problems continue to exist. One possible reason that these policies and services have failed to have a significant impact is that the military population is constantly changing. Each year, roughly 220,000 new accessions join the ranks of the armed forces. Additionally, the military is geographically separated and interventions need to be highly transportable while remaining efficacious in order to realize a public health impact.

This symposium will provide an overview of the three main health risk behaviors plaguing the military: obesity, alcohol abuse and tobacco use. Dr. Hryshko-Mullen will present an overview of the health

behaviors among active duty military personnel and introduce the learning objectives, as well as moderate the discussion. Dr. Krukowski will provide background on overweight and obesity in the military and provide preliminary findings regarding the characteristics of those who are interested in engaging in a behavioral weight loss intervention. She will then discuss the study design for two ongoing weight management interventions. Dr. Little will discuss the problem of tobacco use in the military, with a specific focus on the high rates of initiation and re-initiation occurring during Air Force Technical Training. She will then provide preliminary results from brief interventions that have shown promise. The last topic will be led by Dr. Talcott, who will present problematic drinking in Air Force Technical Training and the resultant problems of alcohol related incidents in the training environment. Additionally Dr. Talcott will describe efforts to disseminate an effective brief alcohol intervention in multiple, geographically separated, Technical Training bases.

## **PRESENTER CONTRIBUTIONS**

### ***Dr. Hryshko-Mullen***

This presentation will consist of an overview of the problems of overweight, obesity, alcohol abuse and tobacco use among U. S. military personnel, including the prevalence as well as the impact on military readiness. Dr. Hryshko-Mullen will also provide an introduction to the learning objectives.

### ***Dr. Krukowski***

This presentation will focus on two ongoing behavioral weight management interventions at Joint Base San Antonio (a behavioral weight loss intervention and a gestational weight gain and postpartum weight loss intervention). Dr. Krukowski will share some preliminary findings regarding the demographic characteristics of those who were interested in the behavioral weight loss intervention as well as the motivating factors for participating in the intervention in this diverse population of active duty personnel. Dr. Krukowski will then discuss the study design of both interventions, including details of the evidence-based components as well as the possibilities for disseminating these interventions to primary care settings, should they be efficacious.

### ***Dr. Little***

This presentation will provide an overview of the problem of tobacco initiation and re-initiation in technical training and a review of brief tobacco interventions that have capitalized on this teachable moment to significantly reduce rates of tobacco use. We will provide a synthesis of the strengths and limitations of these previous studies and how this has led to our current intervention research with Air Force Technical Trainees. Dr. Little will share some preliminary findings from her current research which examines the short-term impact of a brief tobacco intervention on tobacco use at the end of Technical Training. She will conclude with ways the intervention, if proven efficacious, could be disseminated to other settings.

### ***Dr. Talcott***

This presentation will report on the results of a tailored brief alcohol intervention designed to decrease alcohol related incidents among Air Force Technical Trainees. Additionally this presentation will describe preliminary results of a dissemination trial expanding this intervention across four geographically separated Air Force Technical Training installations.

## **STRUCTURE OF THE SYMPOSIUM**

The moderator will begin with a brief introduction to the major health behavior risks facing active duty military populations. Each presenter will identify one health risk behavior, describe innovative interventions within the military with a focus on disseminable interventions in population health and present future directions. Each presenter will briefly review their respective topic area, leaving ample time for a discussion. We will elicit participation from the audience by proposing specific questions, such as how our findings could be applied to the audience's specific settings or populations. If there is sufficient interest, we will end the session with small group discussions organized around health behaviors (e.g., obesity, tobacco use and problem alcohol use) to foster collaborations.

### **Disclaimer:**

*The views expressed are those of the author(s)/presenter(s) and do not reflect the official views or policy of the Department of Defense or its Components*

*The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02\_AFI 40-402*



## **Phone-based and Technology Enhanced Behavioral Weight Management Interventions and Motivations for Engagement: It's Not Just All About the Fitness Test**

Rebecca A. Krukowski, PhD<sup>1</sup>, Courtney Maclin-Akinyemi, MS<sup>2</sup>, Marion E. Hare, MD<sup>1,3</sup>, Mehmet Kocak, PhD<sup>1</sup>, G. Wayne Talcott, PhD<sup>1,4</sup>, Melissa A. Little, PhD<sup>1,4</sup>, Karen C. Johnson, MD<sup>1</sup>, Teresa M. Waters, PhD<sup>1</sup>, Jean Harvey, PhD, RD<sup>5</sup>, Alexis Beauvais, MD<sup>6</sup>, Phyllis A. Richey, PhD<sup>1,3</sup> & Robert C. Klesges, PhD<sup>1</sup>

<sup>1</sup> University of Tennessee Health Sciences, Department of Preventive Medicine, Center for Population Sciences, 66 Pauline, Memphis, TN 38105;

<sup>2</sup> University of Memphis, Department of Psychology, 1000 Innovation Dr., Memphis, TN 38111;

<sup>3</sup> Department of Pediatrics, University of Tennessee Health Science Center, 50 N. Dunlap, Memphis, TN 38105;

<sup>4</sup> Military Population Health, Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center, 2200 Bergquist Dr., STE 1, Lackland AFB, TX 78236

<sup>5</sup> University of Vermont, Department of Nutrition and Food Science,

<sup>6</sup> San Antonio Uniformed Services Health Education Consortium, Department of Internal Medicine, San Antonio, TX

There is a common misconception that U.S. military personnel are fit, lean, and healthy; on the contrary, 51% of military personnel are overweight and 12% are obese. In addition, many women (and particularly overweight and obese women) gain weight excessively while pregnant, and excessive gestational weight gain is a significant risk factor for perinatal complications and postpartum weight retention. Excess weight and inadequate fitness can prevent promotion or even lead to discharge from military service. However, there have been few studies examining obesity interventions in the military. This symposium will describe two ongoing phone-based and technology-enhanced behavioral weight management studies taking place at Joint Base San Antonio. The first study, Fit Blue, is comparing two adapted (counselor initiated and self-paced) versions of the evidence-based Look AHEAD Intensive Lifestyle Intervention, in order to elucidate cost-effective strategies for assisting male and female active duty military personnel with losing weight and maintaining that weight loss over 12 months. The Fit Blue participants (n=248) are 50.8% female, 19.8% African American, 22.6% Hispanic,  $34.6 \pm 7.5$  (mean  $\pm$  SD) years old with a mean BMI of  $30.6 \pm 2.7$  kg/m<sup>2</sup>. Military rank is distributed from E1-4 to O4-6, with the highest proportion in the E5-6 category (40.3%). Motivations for weight loss were assessed at baseline; the four motivations for weight loss most frequently endorsed as "very important" by the overall sample were: improved physical health, improved fitness, improved quality of life, and to live long. 'To pass the fitness test' was endorsed somewhat less frequently as a "very important" motivation. There were significant gender, race, ethnicity, age, and rank differences in the endorsement of weight loss motivations; however, there were no significant differences in weight loss motivators between overweight and obese participants. The primary outcomes in this ongoing study will be weight loss at 4 months, weight maintenance at 12 months, and fitness test performance. In the second study, Moms Fit 2 Fight, we will recruit 450 pregnant active duty women in order to determine whether a stepped-care gestational weight gain intervention, a stepped-care postpartum weight loss intervention, or a combination of the two interventions is most efficacious in improving postpartum weight loss,



improving maternal and child health outcomes, reducing excessive health care utilization, and improving postpartum fitness test performance. With both the Fit Blue and Moms Fit 2 Fight interventions, participants receive one-on-one phone-based sessions conducted by trained counselors with military expertise, activity trackers, electronic scales, and access to a toolbox of additional resources. If successful, the behavioral weight management intervention(s) could be disseminated to the entire United States Military and integrated into standard health care for active duty military personnel.

### **Tobacco Initiation and Re-initiation following a Period of Forced Abstinence: Brief Tobacco Interventions**

Melissa A. Little, PhD,<sup>a</sup> Gerald W. Talcott,<sup>a</sup> PhD, Jon O. Ebbert, MD,<sup>c</sup> Zoran Bursac, PhD,<sup>a</sup> Ann S. Hryshko-Mullen<sup>d</sup> & Robert C. Klesges, PhD<sup>a</sup>

<sup>a</sup>Military Population Health, Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center, 2200 Bergquist Dr., STE 1, Lackland AFB, TX 78236

<sup>b</sup> Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center, 66 N. Pauline St., Memphis, TN 38105, United States

<sup>c</sup>Mayo Clinic, 200 First St. SW, Rochester, MN 55905

<sup>d</sup>Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio- Lackland

While the prevalence of cigarette use has remained relatively stable over the past decade, other tobacco products have grown in popularity, particularly among young adults presenting for military service. The US military is a high-risk population for tobacco use given their demographics, psychosocial risk factors, and targeted marketing by the tobacco industry. While the military has taken steps to reduce tobacco use for the past two decades, 26.9% of new Air Force recruits report regular tobacco use prior to enlistment. This is 5.6% higher than the national prevalence among US adults, suggesting that the military is “inheriting” a major public health problem. But even more concerning, 28.5% of Airmen report regular use of tobacco products one year after enlistment, demonstrating that the prevalence of tobacco products increases in Airmen’s first year in the Air Force.

Brief health prevention programs may be particularly effective for Airmen in Technical Training, given that all Airmen have been tobacco free for 11 ½ weeks and nearly 2/3<sup>rd</sup>s are confident they will remain tobacco free. This presentation will provide a review of brief tobacco interventions that have capitalized on this teachable moment to significantly reduce rates of tobacco use. We will provide a synthesis of the strengths and limitations of these previous studies and how this has led to our current intervention research with Air Force Technical Trainees.

We have developed and validated a Brief Tobacco Intervention (BTI) that is currently being implemented as part of Technical Training. We found that a motivational interviewing based, 40 minute BTI was efficacious in increasing perceived harm and decreasing intentions to use tobacco in a sample of 1055 Air Force trainees. Although we obtained significant positive changes in latent cognitive constructs for tobacco behavior that are highly predictive of future tobacco use in youth and young adults, we did not obtain measures of actual tobacco resumption following the ban on tobacco in Air Force training. We will present preliminary findings from our current evaluation of the BTI which examines the short-term impact of the BTI on tobacco use at the end of Technical Training. We will conclude the presentation by highlighting ways the intervention, if proven efficacious, could be disseminated to other settings.

### **Disseminating a Brief Alcohol Intervention in Air Force Technical Training**

Gerald W. Talcott,<sup>a</sup> PhD, Melissa A. Little, PhD,<sup>a</sup> Jon O. Ebbert, MD,<sup>c</sup> Zoran Bursac, PhD,<sup>a</sup> Ann S. Hryshko-Mullen<sup>d</sup> & Robert C. Klesges, PhD<sup>a</sup>

<sup>a</sup>Military Population Health, Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center, 2200 Bergquist Dr., STE 1, Lackland AFB, TX 78236

<sup>b</sup> Center for Population Sciences, Department of Preventive Medicine, University of Tennessee Health Science Center, 66 N. Pauline St., Memphis, TN 38105, United States

<sup>c</sup>Mayo Clinic, 200 First St. SW, Rochester, MN 55905

<sup>d</sup>Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio- Lackland

Underage drinking and episodic binge drinking are associated with adverse health, social, and occupational consequences. Overall, military personnel drink more than demographically similar civilians. Alcohol misuse costs the Department of Defense \$745 million in reduced readiness and misconduct charges alone. Given that new Airmen have been willing to make a number of life changes in order to join the military, we hoped that this might be a “teachable moment” when Airmen are more likely to be influenced regarding their health risk behaviors. Brief alcohol interventions have been shown to reduce binge and episodic drinking in civilian populations. We developed a tailored, brief alcohol intervention (BAI) for new Technical Trainees with the idea that they might be more receptive to behavior changes regarding alcohol use. This presentation will report on the results of a group-based BAI intervention to new technical training Airmen with the desired outcome being a decrease in alcohol related incidents (e.g., underage drinking, driving under the influence) during Technical Training.

The BAI is a 40 minute, group-based intervention delivered during the first week of Technical Training. During fiscal years 2010 and 2011, we evaluated the efficacy of the intervention among Airmen undergoing Air Force Technical Training in the 37<sup>th</sup> Training Group at Lackland AFB. The intervention was associated with significant reductions in the odds of having an alcohol related incident over the course of the intervention year compared to the previous year (odds ratio 0.555; 95% confidence interval 0.380–0.811;  $p = 0.0023$ ). The average rate of alcohol related incidence per 1,000 trainees per quarter was reduced from 7.30 before implementation of the brief alcohol intervention to 4.06 following



implementation. This intervention was not only effective in reducing alcohol related incidents but also was cost effective.

Next we will describe the dissemination trial expanding this intervention across five geographically separated Air Force Technical Training installations and provide preliminary results. We will conclude with a discussion of the lessons learned from developing and disseminating a population-based intervention in Air Force Technical Training.

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